

Presidential Approval Ratings on Midterm Elections

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Abstract

This paper examines midterm elections in the quest to find the evidence which accounts for the electoral loss of the party controlling the presidency. The first set of theory, the regression to the mean theory, explained that as the stronger the presidential victory or seats gained in previous presidential year, the higher the midterm seat loss. The economy/popularity theories, elucidate midterm loss due to economic condition at the time of midterm. My paper assesses to know what extent approval rating affects the number of seats gain/loss during the election. This research evaluates both theories' and the aptness to expound midterm seat loss at midterm elections. The findings indicate that both theories deserve some credit, that the economy has some impact as suggested by previous research, and the regression to the mean theories offer somewhat more accurate predictions of seat losses. A combined/integrated model is employed to test the constant, and control variables to explain the aggregate seat loss of midterm elections since 1946.

Key Word: Approval Ratings, Congressional elections, Midterm

Presidential elections, House of Representatives

INTRODUCTION

Political parties have always been an integral component of government. In recent years, looking at the Clinton, Bush, Obama and Trump administration, there are no designated explanations that attempt to explain why the President's party lose seats. To an average person, it could be logical to conclude that the President's party garner the most votes during midterm elections, but this is not the case. Some factors could affect the outcome of the election which could favor or not favor the political parties

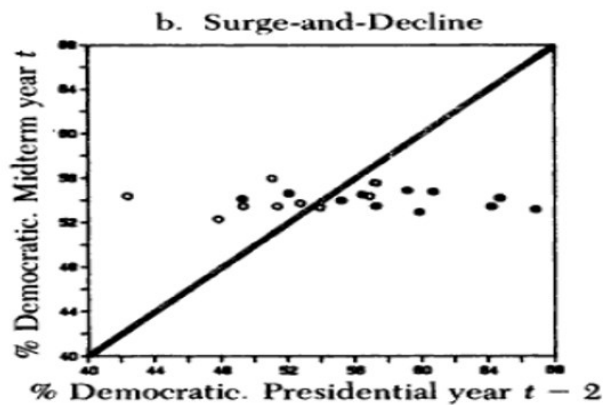
The trend in the midterm election over the years have yielded various results, but most often, affecting the president's party by losing congressional house seats at midterm. However, in recent times, the most significant net, sixty-three seats, loss in the history of the House came under President Obama. Previous studies have emphasized that no central theory that explains the president's party seat loss, but maintains the notion that any best fit theory that attempts to explain the nature of midterm loss must put in consideration other factors i.e the electorate behavior or the present state of the society(economy). Several researchers have proposed theories such as surge and decline theory, economy/popularity theory, balance theory, referendum theory, presidential penalty model (Campbell 1985) Furthermore, explaining the decline of midterm election which includes economic conditions, approval ratings of the president, and strength of presidential coattails (Erikson, 1998).

This paper examines midterm elections since 1946 as well as the presidential election cycle to see how much influence it has on midterm elections. This study focuses on presidential approval rating influence on the number of seats gained or lost in the Congress during the midterm elections.

Two sets of hypothesis were proposed to test the significance of Approval ratings before Midterm and after Presidential elections. However, it was deduced that approval rating was significant before midterm and not for the case before presidential elections. The economy/popularity model and the combined model predicted the unemployment rate is an essential factor while considering the seat loss in the house. It is predicted that for any increase in the unemployment rate, there will be a seat loss in the house of approximately two units. Regarding the seat gain, the presidential approval rating (before midterm), the GDP growth rate, and the number of crises predict an increase in house seats in the house.

Review of Literature

Several different theories explain the effect of presidential approval rating on the midterm election. According to Campbell (1985), the coattails/surge-and-decline theory explains the loss of midterm election by associating to previous presidential elections. However, Campbell (1985) introduces an integrated model which analyzed the differences between a President's first term and second term. At the time of this research, only ten midterm election cycles were examined since 1946. Other variables included in this research include the President's popularity and the percent of annual change in real disposable income per capita. Comparing the 1982 and 1986 midterm elections, Campbell (1985) study found that in 1982, the Republicans lost 26 seats which means that in the preceding presidential election, Carter had won by a healthy margin, but was not a popular President. While, in 1986, the estimated predicted loss was at 34 seats based on the fact that Reagan won by a large percentage (59%), and he received average popularity ratings (p.1153-1154).



Midterm vote by presidential year vote by Erikson (1988), p. 1021

The surge and decline in Figure 1b above illustrate an unstable on-year vote and a stable off-year vote. The congressional elections from 1946 to 1978 attained 4.9 percentage points for

midterm years, while it reached 2.4 percentage points for Presidential years. Since the midterm results are unpredictable, it is not a good fit to understand midterm loss.

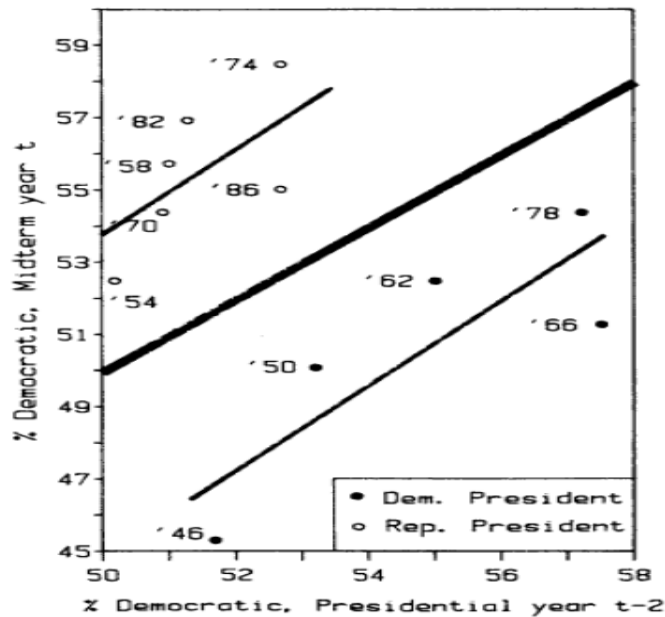
According to Campbell (1985), the economy/popularity theory explains the midterm loss by the economic situation before or around the midterm election. However, a different approach, the balance theory explains campaign efforts which motivate voters against the President's party to attain a balance in Congressional power (Bafumi, Erikson, and Wlezien, 2010, p.707). Voters belonged to different political spectrums and based on that; they are motivated to side with policy closer to their desired policy position. It is common that presidents are liable to advocate policy either to the left or right, depending on their political affiliation, of most of their voters. Campaigning is a political tool which has been utilized by many, and it has continued to prove useful.

In conclusion, both sets of theories attempt to explain the midterm election loss. The economy popularity theory and balance theory seem to act based on the response of the voters. The former theory acts based on the president's party achievement, while the latter act based on how well the president's party is able to represent the interest of its voters.

Erikson (1988) employs the 'Presidential penalty' as his theory of explaining the midterm loss because other explanations are incompatible with the historical data. In interpreting this theory, the voters penalize the President's party for being the party in power due to an ideological political difference or negative voting, which is a vote cast against a candidate. The negative voting is not a common voting phenomenon in democracy, but it works by casting a positive or negative for a candidate and the candidate with the net positive vote wins. The President's party performs worse at midterm than it would if it did not control the Presidency.

The study examines the midterm election results since 1902 to prove that the party managing the presidency suffers at midterm. The data for review was the preliminary dataset pool from 1946 economic data to 1986. Before 1946, there were no dataset available, hence, for the theory be put to the test,

FIGURE 2.
MIDTERM VOTE BY PRESIDENTIAL YEAR VOTE, 1946–1986



Midterm vote by Presidential year vote by Erikson (1988), p. 1021

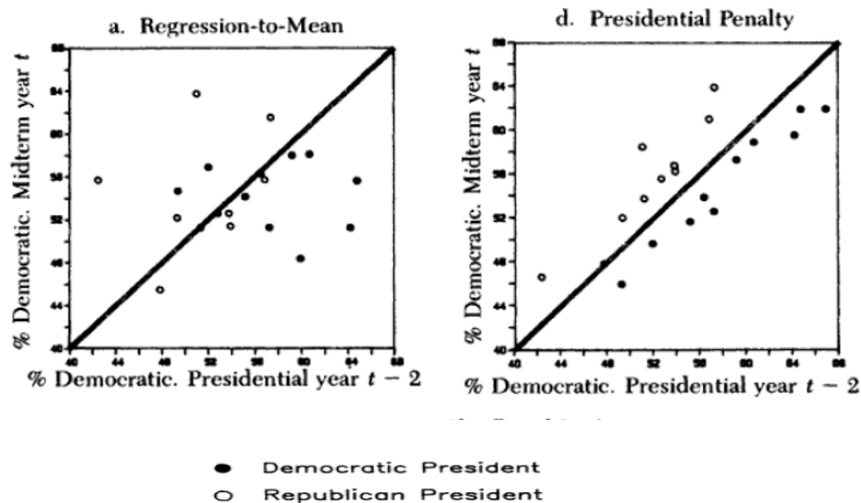
the number of cases was doubled creating a total of twenty-two midterms from 1902 to 1986.

Erikson's (1988) study found that during the election, the gap between the two parties during an off election year and on an election year is relatively close. The voters punish the party in control and tend to favor the out party. In Figure 2 above, the President's party is susceptible to lose 9 percent of the midterm vote if the party is in control.

A similar theory that explains the midterm loss is the Regression to the mean theory. This theory supports the fact that as the Presidential victory margin grows higher, or the higher the

seats won in the Presidential year, the higher the midterm loss of seats (Erikson, 1988, p.1012).

The theory explains the Presidential party as having the advantage in the on- year House election due to the Presidential coattails but suffers a decline in the following off-year election.



Midterm vote by Presidential year vote by Erikson (1988), p. 1021

In the above diagram a and d, *the presidential penalty model* penalizes the Presidential party. In the figure above, it shows that when there is democratic control of the Presidency, the midterm vote results to this equation:

Prior on-year vote – Democratic Presidents' Penalty

When the Democrats leave power, the midterm vote results:

Prior on-year vote + Gain from Republican Presidential Penalty (p.1017-1018).

The Regression-to-mean model involves Presidential coattails that are absent during the midterm elections. The influence of the coattails during the Presidential election will be nonexistent during the midterm elections. By observing the independent variables, the on-year results of the elections are uncorrelated with the next off-year results. This model is unable to account for the regularity of midterm loss.

In conclusion, the presidential penalty theory aims at voting against the party in power, while the regression to the mean model base the decision on previous presidential year election results to determine how they vote.

This research paper contributes to the literature by introducing a control variable labeled as “Number of crises or war.” This variable brings into consideration the view of the people regarding the U.S involvement in both external and internal crises/war. I believe this is an important factor that contributes to the presidential approval rating. In previous administrations, for example, the response of the President to the 9/11 attack improved the president’s score. Regarding testing the theories whether it corroborates with previous literature, my paper evaluated these models and analyzed some of the theories, and the findings are explained.

THEORY

Over the years, there have been different explanations attributed to the voters’ behavior during the election. The voters respond by assessing the President on the quality or the influence of the administration on the country. The economy has been a reliable predictor that voters used to assess the President. For most people, the economy is vital because if there is a booming economy, there will be more employment opportunities which will benefit the people. Other

voters believe that when the economy is good, there is room for a wage increase which will also benefit them. Depending on the voters' motive, when the economy is good, the people are likely to give the President a higher approval rating. Assuming the economy predictors are *GDP growth and unemployment rate*, we can gauge their effect depending on how well they influence the voter's decision. Although the GDP growth is the most significant indicator of the economic health, it is attained over some time which in most cases, on a yearly basis. The unemployment rate reflects the unemployed workers in the labor force. This indicates that there is an immediate impact on the people, which may lead to a lack of job opportunity and could affect the ratings of the President. These indicators enable us to see the short term effect (unemployment rate) on the people and also the long-term effect (GDP growth rate) on the country itself which can influence the ratings of the Presidents and subsequently affect the President's party at elections.

However, a good Presidential approval rating does not necessarily mean the president will prevail at midterm, although, it is a great booster for the president. When a president comes in with high approval rating, the voter's expectations are high, therefore, they expect him to deliver on certain promises. If the president does not deliver his promises or passes unpopular bills, the voters react by opposing the president's party during the midterm elections, hereby losing seats in Congress. If a president comes in with an average or low approval rating, there are still expectations for him to perform and win back the voters, but if he does not deliver, the voters equally react at the poll during elections by voting against his party. For example, the Obamacare bill was an unpopular bill which passed in 2010 and the voters reacted by voting against his party, losing sixty- three seats in the house, thus, giving Republicans the majority.

In this research, assuming that the approval ratings of the President before midterm and Presidential election influences the seats change in the house, I propose two hypotheses:

Hypothesis 1: I hypothesize that in comparing Presidential votes, the lower the approval ratings of President before **midterm elections**, the higher the Congressional seats lost in the house.

Hypothesis 2: I hypothesize that in comparing Presidential votes, the lower the approval ratings of President before **Presidential elections**, the higher the Congressional seats lost in the house

Data and Methods:

The data for this project was obtained from Gallup.com, Bureau of Labor Statistics, the Balance.com and ICB project at Duke University (<https://sites.duke.edu/icbdata-collections/>).

The data from Gallup include the following for every President since 1946. The approval ratings before midterm elections since 1946 and selected approval ratings at Presidential elections in 1948, 1956, 1964, 1972, 1984, 1996, 2004, and 2012 were collected, as well as the net gain/loss of his party during that year's election. The selected approval ratings before Presidential elections include the rating of the Presidents at their second term excluding Jimmy Carter (1976).

This is because Jimmy Carter served one term in office. The approval rating was based on Gallup nationwide random polling, and the seats won or lost were based on Congressional data.

The bureau of labor statistics data includes the unemployment rate for every year since 1947 which would serve as one of our control variables. The balance data shows the US GDP by a year since 1929 compared to significant events. For this research, the GDP growth rate is of utmost importance which serves as the second variable. The ICB project data consist of the international crisis behavior of countries. My data was restricted to the US involvement regarding the number of crises involved.

¹The central portion of this analysis requires the measurement of four independent variables. The Dependent variable is the number of seats gained/loss in the midterm by the President's party. The first Independent variable is the *approval ratings of the President's before midterm elections/ratings of Presidents before Presidential elections*. The second and third variable are predictors of the economy which include the *unemployment rate and GDP growth rate*. The fourth variable is related to the involvement of the US in both external and internal wars labeled as *Number of crises/ War* which explains the number of times the US got involved in both foreign and domestic crises.

The raw data are based on telephone interviews conducted as part of Gallup Daily tracking July 26-Aug. 1, 2010, with a random sample of 3,544 adults, aged 18 and older, living in all 50 U.S. states and the District of Columbia, selected using random-digit-dial sampling. For results based on the total sample of national adults, one can say with 95% confidence that the maximum margin of sampling error is ± 2 percentage points. Interviews are conducted with respondents on landline telephones and cellular phones, with interviews conducted in Spanish for respondents who are primarily Spanish-speaking. Each daily sample includes a minimum quota of 150 cell phone respondents and 850 landline respondents, with additional minimum quotas

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among landline respondents for gender within region. Landline respondents are chosen at random within each household by which member had the most recent birthday. Samples are weighted by gender, age, race, Hispanic ethnicity, education, region, adults in the household, cell-phone-only status, cell phone-mostly status, and phone lines. Demographic weighting targets are based on the March 2009 Current Population Survey figures for the aged 18 and the older non-institutionalized population living in U.S. telephone households. All reported margins of sampling error include the computed design effects for weighting and sample design (Gallup.com, 2010).

A Bivariate and Multiple Regression analysis were used to analyze my data. The bivariate regression is used to test a set of Independent variables with the constant (Dependent variable). The multiple regression is used to examine all the Independent variables and control variables against the Constant to examine the variation. The reason for employing regression analysis as my statistical technique is to understand the relationship between the variables especially between the dependent and independent variable. The introduction of different control variables in my research helps to estimate the strength between two or more variables.

FIG A:**²TABULAR REPRESENTATION OF DATA**

Year	President	Party	Approval Rating before Mid-term	Seat gain/loss in the House	Unemployment Rate	GDP Growth	Midterm/ Presidential Coding. 0 – Midterm 1-Presidential	Number of Crises
1946	Harry Truman	D	33%	-45	-	-11.6	0	5
1950	Harry Truman	D	39%	-29	5.3	8.70	0	4
1954	Eisenhower	R	61%	-18	5.5	-0.6	0	6
1958	Eisenhower	R	57%	-48	6.8	-0.7	0	7
1962	John F. Kennedy	D	61%	-4	5.5	6.1	0	7
1966	Lyndon Johnson	D	44%	-47	3.8	6.6	0	2
1970	Nixon	R	58%	-12	4.9	0.2	0	7
1974	Ford	R	54%	-48	5.6	-0.5	0	1
1978	Carter	D	49%	-15	6.1	5.5	0	10
1982	Reagan	R	42%	-26	9.7	-1.8	0	5
1986	Reagan	R	63%	-5	7	3.5	0	6
1990	G.H.W Bush	R	58%	-8	5.6	1.9	0	3
1994	Bill Clinton	D	46%	-52	6.1	4.0	0	5
1998	Bill Clinton	D	66%	+5	4.5	4.5	0	9
2002	George Bush	R	63%	+8	5.8	1.7	0	5
2006	George Bush	R	38%	-30	4.6	2.9	0	7
2010	Barack Obama	D	45%	-63	9.6	2.6	0	2

Tabular representation of data.

2014	Barack Obama	D	44%	-13	6.2	2.5	0	2
1948	Truman	D	36%	75	3.8	4.1	1	7
1956	Eisenhower	R	68%	-2	4.1	2.1	1	5
1964	Lyndon Johnson	D	74%	37	5.2	5.8	1	8
1972	Nixon	R	58%	12	5.6	5.3	1	4
1984	Reagan	R	58%	14	7.5	7.2	1	6
1996	Bill Clinton	D	56%	-9	5.4	3.8	1	6
2004	Bush Jr	R	37%	3	5.5	3.8	1	2
2012	Obama	D	48%	8	8.1	2.2	1	2

Comparison of Models from Literature

In this section, I will be testing some theories as suggested in the literature with my data to check the predictability and to compare results with previous literature. The idea is to use my data and see if there is any consistency with previous literature. For proper clarification, the midterm approval ratings are coded as '0' while the Presidential ratings are coded as "1". The first step in this analysis is to estimate the Economy/Popularity model, Coattails/Surge and Decline model and Regression to the mean model. For analysis for the surge and decline model, one variable would be employed which is the main Independent variable; Approval ratings of Presidents before Presidential elections which is coded as "1" in the description in comparison with the

Dependent variable; seats gained/loss in the House. The Surge and Coattail model associates midterm elections to the previous presidential election.

3

Analysis for the Coattails/Surge and Decline Model

FIG B:

Presidential coding = 1	R Square	Adjusted R Square	Std Error of Estimate
.275	.075	-.079	28.064

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	Unstandardized B	Coefficient Std. Error	Standardized Coefficients Beta	T	Sig
Constant	47.106	43.794		1.076	.323
App ratings before midterm	-.549	.784	-.275	-.700	.510

a. Dependent Variable: Seat gain/Loss in the HOUSE

b. Selecting only cases for which Midterm/Presidential coding = 1

³ The midterm approval ratings are coded as '0' while the Presidential ratings are coded as "1".

Comparison of model – My data Vs Previous literatures (data)

⁴ The midterm ratings were coded as '0' and Presidential ratings coded as '1'

For the surge and decline, the Presidential ratings coded as "1" was used in regression

In **FIG B**, the adjusted square explains -7.9% of the variation in a Dependent variable as explained in the model. This means for every increase in approval rating before the Presidential election; there is a decrease in seats gained in the house of -.549

The combined model takes into consideration all the variables to test how well the variables fit and see how significant they are when combined with other variables. The table below shows a regression analysis of the combined model.

FIG C:

	Unstandardized B	Coefficients Std Error	Standardized Coefficients Beta	T	Sig
Constant	-74.123	37.172		-1.994	.069
Approval rating before midterm	.927	.478	.456	1.938	.076
Unemployment rate	-2.077	3.286	-.153	-.632	.539
GDP Growth	.587	1.804	.080	.325	.751
Number of Crises	2.572	1.886	.310	1.363	.198

R/Midterm coding =0	R Square	Adjusted R Square	Std Error of the Estimate
.665	.442	.256	18.444

The combined model explains 25.6% variation in the dependent variable. By looking at the combined result, all the variables have specific interpretation, but none of the variables are significant.

Test of Models

In this section, I will be testing to see how well my data fits the model. The regression to the mean theory as explained means that the stronger the presidential seats gained in previous presidential year, the higher the midterm seat loss. In order to test for this, I collected data from 1948 presidential elections up till date and compared it to the actual midterm seat loss. The presidential election years are on the left side, while the midterm seat gain or loss are on the right side. The table below shows the presidential year election year with approval rating and seats gained/ lost and midterm election year with approval rating and seats gained/lost. A tabular representation is used to understand the comparison.

FIG D

Year Presidential Year	Presidents	Seat gain/lost		Year Midterm Year	Presidents	Seat gain/lost
1948	Truman	75		1950	Truman	-45
1952	Eisenhower	22		1954	Eisenhower	-18
1956	Eisenhower	-2		1958	Eisenhower	-48
1960	J.F Kennedy	-22		1962	J.F Kennedy	-4 ****
1964	L. Johnson	37		1966	L. Johnson	-47
1968	Nixon	5		1970	Nixon	-12

1972	Nixon	12		1974	Nixon/Ford	-48
1976	J. Carter	1		1978	J. Carter	-15
1980	Reagan	34		1982	Reagan	-26
1984	Reagan	14		1986	Reagan	-5
1988	G. Bush	-2		1990	G. Bush	-8
1992	Clinton	-10		1994	Clinton	-52
1996	Clinton	-9		1998	Clinton	5 ****
2000	W. Bush	-3		2002	W. Bush	8****
2004	Bush Jr	3		2006	Bush Jr	-30
2008	Obama	23		2010	Obama	-63
2012	Obama	8		2014	Obama	-13
2016	Trump	-6		2018	Trump	-40

Comparing the presidential victory and seats gained to the effect on the midterm seat gained or lost, there seems to be a consistent pattern over the years. There is an exception of three years: 1960, 1996, and 2000 which the presidential seats gain had positive impact on the midterm seats gain. The column with asterisk (*) signifies is irrelevant to the theory because it does not align with the other data.

The second model that will be tested which is the Economy/Popularity model associates the midterm loss to the economic condition and popularity of the President before the midterm. In this analysis, the constant is tested against the economic predictability i.e. GDP and Unemployment rate and the approval rating of the Presidents. Figure E. Shows the combined economic effect of the Economy / Popularity model.

Figure E. Economy / Popularity Model

FIG E:

R/Midterm coding = 0	R Square	Adjusted R Square	Std. Error of the Estimate
.596	.355	.207	19.044

a. Predictors: (Constant), GDP GROWTH, Approval Ratingbefore midterm election , Unemployment Rate

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	Unstandardized B	Coefficients Std. Error	Standardized Coefficients Beta	t	Sig
GDP Growth	.850	1.852	.116	.459	.654
Approval ratings before midterm & Presidential election	1.105	.475	.543	2.324	.037
Unemployment Rate	-2.463	3.380	-.182	-.729	.479

a. Dependent Variable: Seat gain/Loss in the HOUSE

⁵ Only midterm approval rating considered. It is coded as "0"

In **FIG E**, the model explains 20.7% of the variation in a Dependent variable as explained in the model. By comparison of the variables and the extent to which it is affected, the table explains that for every increase in approval rating, there is an increase in some seat in the house of 1.105units. Explaining the other variable, for every increase in the unemployment rate, there is a decrease in the number of seat in the house of -2.463 units. Lastly, for every increase in GDP growth rate, there is an increase in the number of seat in the house of .850 units. Out of the variables in this model, only the approval ratings of presidents before midterm was significant (.037).

TEST FOR HYPOTHESIS

Hypothesis 1: I hypothesize that in comparing Presidential votes, the lower the approval ratings of President before midterm elections, the higher the Congressional seats lost in the house.

FIG F:

Midterm/Presidential coding = 0	R Square	Adjusted R Square	Std Error of Estimate
.575	.330	.289	17.995

a. Predictors: (Constant), Approval Ratingbefore midterm election

	Unstandardized B	Coefficient Std. Error	Standardized Coefficients Beta	T	Sig
Constant	-80.921	20.348		-3.977	.001
App ratings before midterm	1.105	.393	.575	2.810	.013

As stated earlier, for the analysis, the approval rating data coded “0” for MIDTERM elections and “1” for PRESIDENTIAL elections.

Hypothesis 1: The data is coded “0” for the approval ratings before MIDTERM elections — the Adjusted R Square 28.9 percent which explains 28.9 percent variation in a Dependent variable as explained in the model. This means that for every increase in approval rating before the midterm election, there is an increase in seat gained of 1.105 units.

$P < .05$ stating that the value of P is significant

Therefore; the approval rating before midterm is significant

Hypothesis 2: I hypothesize that in comparing Presidential votes, the lower the approval ratings of President before Presidential elections, the higher the Congressional seats lost in the house

⁶**FIGURE G:**

Midterm/Presidential coding = 1	R Square	Adjusted R Square	Std Error of Estimate
.275	-.079	-.079	28.064

a. Predictors: (Constant), Approval Ratingbefore midterm election

Observing the negative adjusted R squared in **FIG G**, it is an indication that there is insufficient data available. The Presidential approval ratings has a limited sample size which makes it hard to reach a conclusion.

	Unstandardized	Coefficient Std.	Standardized	T	Sig
	B	Error	Coefficients Beta		
Constant	47.106	43.794		1.076	.323
App ratings before midterm	-.549	.784	-.275	-.700	.510

Observing the negative adjusted R squared in **FIG G**, it is an indication that there is insufficient data available.

Hypothesis 2: The data is coded “1” for the approval ratings before PRESIDENTIAL elections
Adjusted R Square -7.9 percent which explains -7.9 percent variation in the Dependent variable as explained in the model. This means that for every increase in approval ratings before the Presidential election, there is a decrease in the seat of -.549 units

$P > .05$

.510 is greater than .05

It is not significant

Negative Adjusted R squared means that there is insignificance of explanatory variables. The results may be improved with the increase in Sample size.

Finally, we checked for the heteroscedasticity in the our research, and we ran Breush Pagan and White Test analysis. For the Breush Pagan test, the P-value was .110 which shows that it is not significant and heteroscedasticity is not present in the model. Furthermore, we ran the White test, which also produced a P-value of .361 which shows that it is not significant and heteroscedasticity is not present. Additionally, we carried out the ramsey reset analysis and it

shows that the P-value derived, .938 is not significant indicating that there is no model misspecification error.

DISCUSSION

Two sets of theories about the loss of seats at the midterm election have been examined in this research. Both the regression to the mean theories and economy/popularity theories predict seat losses reasonably well. By the eyeball test, which is comparing the number of seats won or lost after Presidential election and after midterm elections, the regression to the mean theories, by comparison, can predict that the higher the number of seats in a previous presidential election, the higher the loss of seats in a midterm election. Looking back at the comparison table FIG D, the data seems consistent with the model, but out of all the years, only three presidential cycle years yielded a different result. In 1960, J.F Kennedy lost 22 seats during the presidential election, but lost only 4 seats during the midterm, although, there is a negative impact, the impact is much lower than the previous presidential year. In 1996, Bill Clinton lost 9 seats during the presidential elections, but gained 5 seats during the midterm and in 2000, W. Bush lost 3 seats at the presidential election and won 8 seats back at midterm elections. These are the only exceptions to this model. Apart from these years, the regression to the mean theory accurately predicts the seat loss at midterm election.

The economy/popularity model permits us to estimate deviations. In the result, we can predict that an increase in GDP growth results in a gain of 8 seats, while an increase in unemployment results in a loss of seats. By using this economy predictability, it is essential that these variables are not related. Hence, a multicollinearity test was conducted to make sure these economic predictors were not closely related. After analyzing both variables, a result of VIF 1.1

was derived which means that there is no concern for the variables. The approval ratings before midterm proved significant in the analysis.

To test for the significance of the main Independent variable, which is *Presidential approval rating*, a bivariate regression method was employed which yielded a high significance approval rating before the midterm election, although, it was insignificant before presidential elections. It is logical to say that, because insufficient data were used to analyze the surge and decline theory, we cannot arrive at a definite result if approval rating mattered before the Presidential election. The Surge and decline theories proved insignificant in my paper because of the insufficient data for Presidential years. There was a negatively adjusted r squared of $-.079$ which automatically suggest that there is a lack of adequate sample size. However, the Coattails/surge and decline model that was tested did not prove or falsify the accuracy of the theory.

The combined model helps us to test the variables and how well they fit each other. A multiple regression method was employed because of the data comprised of more than two variables. After controlling other variables in the analysis, the result predicted that for every additional percentage point of unemployment before the midterm, one can expect the party to lose about two seats at midterm. In the case for GDP growth, for every one percent of GDP growth, the party is expected to gain $.587$ seats. Also, for every one percent increase in approval rating, the party is likely to gain $.927$ seats. Finally, for every number of crises, the party is expected to gain 2 seats. Additionally, we carried out some diagnostics which tested for heteroscedasticity in our paper. We ran Breush Pagan and White Test analysis. For the Breush Pagan test, the P-value was $.110$ which shows that it is not significant and heteroscedasticity is not present in the model. Furthermore, we ran the White test, which also produced a P-value of

.361 which shows that it is not significant and heteroscedasticity is not present. Additionally, we carried out the Ramsey reset analysis and it shows that the P-value derived, .938 is not significant indicating that there is no model misspecification error.

CONCLUSION

This research is driven for the purpose to account for why the president's party suffers losses during midterm elections. The primary goal was to identify which explanation of midterm loss was compatible with the record. During this research, some theories suggested that Presidential election years influenced the outcome of midterm elections, in which data from Presidential election years were added. After analyzing my data, I have concluded that the approval rating is very significant at midterm elections without being controlled with other variables. From my analysis, after being controlled for, it turned insignificant. It is necessary for the President's party to accrue a good percentage point of the ratings. This will help the President's party at midterm elections. When it comes to the people's reaction to the economy, there are different factors which account for this prediction. From the result, I have concluded that unemployment rate negatively affects the President's party at midterm elections. As the unemployment rate increases, there is a seat loss of 2 units. When it comes to the economy, the unemployment rate is the distinct predictor of the economy.

In the case for the other variables – GDP and number of crises, I was expecting that result in the sense that people react to the president's actions especially in a time of distress. For example, the approval rating for W. Bush after 9/11 was overwhelmingly positive because of the steps taken. This is tricky because, at first, some of these crises involved in signifies the strength

of the president and the country, but when it affects domestic relations, the voters tend to disapprove of the situation. A good example of this is the Iraq war which started in 2003 and currently still on the course. A situation whereby the president does not act positively, the voters get concerned and express their dissatisfaction.

In terms of the GDP growth, usually, time frame, within a year, has an effect on the economy and if it is geared positively, this means a better economy for the people. In summary, the regression to the mean and the economy/popularity model both gave some form of prediction, but one is more accurate. The regression to the mean result seems consistent overall and was able to predict the midterm loss apart from three years out of the whole data. The economy/popularity predictor was important in specifying the accuracy of the seats lost.

This research paper had some very strong variables, but there are possible areas in which it could be improved. One of the critical areas is the sample size of Presidential data. I believe the greater the sample size, the better for the research paper. The data for the Presidential approval rating was limited which affected my analysis in some areas. Also, it would be great to see the addition of more control variables in the research. This will effectively test the variation between each other.

In future research, it would be interesting to see the effect the Presidential approval rating has on all the electoral levels, i.e. State and Local elections. Major publicity is given to national elections which isolates state/local elections in the country. The voters pay less attention to the lower level electoral process. Going forward, the effect of these approval ratings on state/local elections will be a good research question to expand.

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